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|---|-------------|----------------------|-----------------------------------|-----------------------------|
| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.               | CONFIRMATION NO.            |
| 10/552,714  | 10/07/2005  | Michael H. May       | PAT 838W-2                        | 4459                        |
| 26123 7590 02/20/2009<br>BORDEN LADNER GERVAIS LLP<br>Anne Kinsman<br>WORLD EXCHANGE PLAZA<br>100 QUEEN STREET SUITE 1100<br>OTTAWA, ON K1P 1J9<br>CANADA |             |                      | EXAMINER<br>ROGERS, JAMES WILLIAM |                             |
|   |             |                      | ART UNIT<br>1618                  | PAPER NUMBER                |
|   |             |                      | NOTIFICATION DATE<br>02/20/2009   | DELIVERY MODE<br>ELECTRONIC |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipinfo@blgcanada.com  
aarmstrongbaker@blgcanada.com  
akinsman@blgcanada.com

|                              |                                      |                                   |  |
|------------------------------|--------------------------------------|-----------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/552,714 | <b>Applicant(s)</b><br>MAY ET AL. |  |
|                              | <b>Examiner</b><br>JAMES W. ROGERS   | <b>Art Unit</b><br>1618           |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/06/2008</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

The amendments to the claims filed 10/07/2005 have been entered.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5,11-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Otterbach et al. (CA 2,384,427, used as an English equivalent to WO 01/19878 A1, cited in applicants IDS).

Otterbach teaches antimicrobial copolymers of acryloylaminoalkyl compounds which can be cationic, the monomer is further copolymerized with aliphatically unsaturated monomers, particularly methyl methacrylate (MMA). See abstract, pag 4 line 1-page 6 line 6. The polymers could be produced by graft polymerization on a substrate; the substrate included several synthetic polymers (considered by the examiner to meet a derivatizable polymer). See page 7 line 1-10. Regarding the limitations within the claims that a spacer group connects the copolymer to the derivatizable polymer, the examiner considered “spacer” as not particularly limiting in that any bond or functional group between the copolymer and derivatizable monomer can reasonably be considered as a spacer. The polymers could be used as microbiocidal coatings on hygiene articles in the medical field.

Claims 1-6,9,13-15 and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Oster et al. (US 5,019,496).

Oster teaches a diagnostic test composition comprising monomers capable of undergoing addition polymerization; the monomers could be selected from AMA, MMA, PPO-Me and combinations thereof. See claim 1. Regarding the recitation that the polymer has antimicrobial activity within the claims, since the polymer of Oster is essentially the same as applicants claimed copolymer it is inherent that the polymer will have the same properties. The limitations of a derivatizable polymer connected by a spacer to a derivatizable polymer were treated as above in that neither limitation was considered very limiting by the examiner and essentially any of the claimed monomers could produce a derivatizable polymer and the spacer could be any bond or functional group between the copolymer and derivatizable monomer.

Claims 1-6,9-10 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Texter et al. (US 5,288,745).

Texter teaches barrier layers comprised of copolymers of formula A-B, the preferred A polymers included AMA, BMA and MMA, the barrier polymer could further comprise block copolymers chosen from polymethylene oxide, PPO and polyurethanes, substituted with methacrylate end groups. See abstract, claims and col 15 line 12-col 17 lin 68. Regarding the recitation that the polymer has antimicrobial activity within the claims, since the polymer of Texter is essentially the same as applicants claimed copolymer it is inherent that the polymer will have the same properties.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-10, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Texter et al.* (US 5,288,745).

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Texter is disclosed above. Texter does not teach the specific amounts of monomers recited within claims 7-8 and 22. However Texter does describe that the polymer should contain a balance of hydrophobic and hydrophilic entities such that they are swellable, but not fully soluble in water or processing solutions as coated. Texter further states that the polymers could be dispersible or soluble in water if formulated as a coating. Thus it would have been obvious and routine for one of ordinary skill in the art to adjust the amounts of hydrophilic and hydrophobic entities contained within a copolymer in order to adjust its properties with the result effective parameter being to obtain the desired effect, as described in Texter such properties include the hydrophobicity and dissolution properties of the polymer. Optimization of parameters is a routine practice that would be obvious for a person of ordinary skill in the art to employ and reasonably would expect success. Thus, absent some demonstration of unexpected results from the claimed parameters, this optimization of the amount of cationic hydrophilic monomer would have been obvious at the time of Applicant's invention.

### **Conclusion**

No claims are allowed. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Rogers, Ph.D. whose telephone number is (571) 272-7838. The examiner can normally be reached on 9:30-6:00, M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michael G. Hartley/

Supervisory Patent Examiner, Art Unit 1618